Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-6 (canceled).

7. (currently amended) <u>A method of authentication of candidate data comprising:</u>

<u>sampling original signals using an uneven sampling rate to produce unevenly sampled original signal data;</u>

<u>comparing the unevenly sampled original signal data with the candidate data for a degree of match;</u>

<u>determining whether the candidate data is authentic based on the degree of match;</u> ~~The method according to claim 6, further comprising:~~

normalizing the candidate data prior to the comparing; and

normalizing the unevenly sampled original signal data prior to the comparing.

8. (original) The method according to claim 7, wherein the comparing comprises calculating a mean square difference between the normalized candidate data and the normalized unevenly sampled original signal data.

9. (original) The method according to claim 8, further comprising comparing the calculated mean square difference to a threshold value, wherein if the calculated mean square difference is greater than the threshold value, the candidate data is determined to be inauthentic.

Claims 10-16 (canceled).

17. (currently amended) <u>An apparatus for authentication of candidate data comprising:</u>

<u>sampling means for sampling original signals using an uneven sampling rate to produce unevenly sampled original signal data;</u>

<u>comparing means for comparing the unevenly sampled original signal data with the candidate data for a degree of match and determining whether the candidate data is authentic based on the degree of match;</u> ~~The apparatus according to claim 16, further comprising:~~

first normalizing means for normalizing the candidate data and providing normalized candidate data to the comparing means; and

second normalizing means for normalizing the unevenly sampled original signal data and providing normalized unevenly sampled original signal data to the comparing means.

18. (original) The apparatus according to claim 17, wherein the comparing means comprises mean square difference calculating means for calculating a mean square difference between the normalized candidate data and the normalized unevenly sampled original signal data.

19. (original) The apparatus according to claim 18, wherein the comparing means further comprises threshold means for comparing the calculated mean square difference to a threshold value, wherein if the calculated mean square difference is greater than the threshold value, the candidate data is determined to be inauthentic.

Docket No.: ROC919990123US1
Serial No.: 09/435,789   3

Claims 20-24 (canceled).

Claim 25 (currently amended): <u>A data processing system comprising:</u>

<u>means for implementing a data watermarking processing comprising</u>

<u>input means for receiving input signals, wherein the input signals are</u> <u>signals representing a work; and</u>

<u>sampling means for sampling the input signals using an uneven sampling</u> <u>rate and outputting unevenly sampled signal data representing the work; and</u>

<u>means for implementing a data watermark authentication processing comprising</u>

<u>comparing means for comparing the unevenly sampled signal data</u> <u>representing the work with the candidate data for a degree of match and determining</u> <u>whether the candidate data is authentic based on the degree of match;</u> ~~The data processing~~ ~~system according to claim 24, wherein the means for implementing a data watermark~~ ~~authentication processing further comprises:~~

first normalizing means for normalizing the candidate data and providing normalized candidate data to the comparing means; and

second normalizing means for normalizing the unevenly sampled signal data and providing normalized unevenly sampled signal data to the comparing means.